

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently Amended) An information processing method for processing a display of a plurality of objects to allow a command text to be used for both vertically-arrayed text and horizontally-arrayed text, the method comprising the steps of:

analyzing ~~the~~ drawing information ~~at least~~ including the information of at least one object that can be displayed and ~~the~~ layout designating information for specifying a relative position direction with respect to ~~the~~ a direction of arranging said the object;

determining a relative placing position of said the object in a desired drawing area based on ~~the~~ layout definition information corresponding to the layout designating information obtained ~~on~~ by the analysis of said the drawing information; and

generating ~~the~~ (real display position information corresponding to the relative placing position of said the object responsive to ~~said the~~ arranging direction; and
displaying the object.

Claim 2 (Currently Amended) The information processing method according to claim 1, wherein ~~said the~~ the layout definition information includes ~~the~~ information indicating ~~the~~ a size of

said the drawing area; and wherein

the drawing area and the relative placing position of ~~said~~ the object in ~~said the~~ drawing area are converted into a real display position.

Claim 3 (Currently Amended) The information processing method according to claim 1, wherein ~~said the~~ object is displayed based on ~~said the~~ real display position.

Claim 4 (Currently Amended) The information processing method according to claim 1, wherein

the relative placing position of ~~said the~~ object is updated ~~responsive in response~~ to a request for changing the drawing direction of ~~said the~~ object; and wherein

the updated relative placing position of ~~said the~~ object is converted to a real display position.

Claim 5 (Currently Amended) The information processing method according to claim 1, wherein

the plurality of objects comprises a first object and a second object;

the a relative placing position of ~~said the~~ first object is determined based on ~~the a~~ layout definition information of a first object; and wherein

~~the a~~ relative placing position of ~~[[a]]~~ the second object is determined responsive to the ~~thus~~ determined relative placing position of the first object.

Claim 6 (Currently Amended) An information processing apparatus for processing a display of a plurality of objects to allow a command text to be used for both vertically-arrayed text and horizontally-arrayed text, the apparatus comprising:

means for analyzing ~~the~~ drawing information ~~at least~~ including ~~the~~ information of at least one object that can be displayed and ~~the~~ layout designating information for specifying a relative position direction with respect to ~~the~~ a direction of arranging ~~said the~~ object;

means for determining a relative placing position of ~~said the~~ object in a desired drawing area based on ~~the~~ layout definition information corresponding to the layout designating information obtained ~~on said by the~~ analysis of ~~said the~~ drawing information; and

means for generating ~~the~~ real display position information corresponding to the relative placing position of ~~said the~~ object ~~responsive in response to said the~~ arranging direction; and

display means for displaying the object.

Claim 7 (Currently Amended) The information processing apparatus according to claim 6, wherein

~~said the~~ layout definition information includes the information indicating the size of ~~said the~~ drawing area; and

~~wherein said conversion~~ the generating means converts the drawing area and the relative placing position of ~~said the~~ object in ~~said the~~ drawing area into a real display position.

Claim 8 (Currently Amended) The information processing apparatus according to claim 6, further comprising:

means for displaying the object based on ~~said~~ the real display position.

Claim 9 (Currently Amended) The information processing apparatus according to claim 6, wherein

the relative placing position determining means of ~~said~~ the object ~~updating~~ updates the relative placing position of ~~said~~ the object ~~responsive in response~~ to a request for changing the drawing direction of ~~said~~ the object; and wherein ~~said conversion~~ the generating means converts the updated relative placing position of ~~said~~ the object to a real display position.

Claim 10 (Currently Amended) The information processing apparatus according to claim 6, further comprising[[:]] means for inputting a request for changing the drawing direction of ~~said~~ the object.

Claim 11 (Currently Amended) The information processing apparatus according to claim 6, wherein

the plurality of objects comprises a first object and a second object;

~~said~~ the placing position decision means determines ~~the~~ a relative placing position of [[a]] the first object ~~is determined~~ based on ~~the~~ layout definition information of ~~said~~ the first object; and

said the placing position decision means ~~determining the~~
determines a relative placing position of [[a]] the second
 object responsive to the ~~thus~~ determined relative placing
 position of ~~said the~~ first object.

Claim 12 (Currently Amended) An information processing
 method for processing a display of a plurality of objects to
allow a command text to be used for both vertically-arrayed
text and horizontally-arrayed text, the method comprising the
steps of:

generating ~~the~~ information of at least one object that can
 be displayed;

generating ~~the~~ layout designating information specifying
~~the~~ a relative position direction with respect to ~~the~~ an
 arranging direction of ~~said the~~ object; and

generating ~~the~~ drawing information at least including the
 object information and the layout designating information; and
displaying the object.

Claim 13 (Currently Amended) The information processing
 method according to claim 12, wherein ~~said the~~ layout
 designating information includes ~~the~~ information representing
~~the~~ a size of ~~said the~~ drawing area.

Claim 14 (Currently Amended) The information processing
 method according to claim 12, wherein ~~said the~~ drawing
 information is distributed.

Claim 15 (Currently Amended) An information processing ~~method~~ apparatus for processing a display of a plurality of objects to allow a command text to be used for both vertically-arrayed text and horizontally-arrayed text, the apparatus comprising:

means for generating ~~the~~ information of at least one object that can be displayed;

means for generating ~~the~~ layout designating information specifying ~~the~~ a relative position direction with respect to ~~the~~ an arranging direction of ~~said~~ the object; and

means for generating ~~the~~ drawing information at least including the object information and the layout designating information; and

display means for displaying the object.

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Claim 16 (Currently Amended) The information processing ~~method~~ apparatus according to claim 15, wherein ~~said~~ the layout designating information generating means includes ~~the~~ information representing ~~the~~ a size of ~~said~~ the drawing area.

Claim 17 (Currently Amended) The information processing ~~method~~ apparatus according to claim 15, further comprising ~~[[:]]~~ means for distributing ~~said~~ the drawing information.

Claim 18 (Currently Amended) A medium for causing an information processing apparatus to execute a program for processing a display of a plurality of objects to allow a command text to be used for both vertically-arrayed and

horizontally-arrayed text, the program including the steps of:

analyzing ~~the~~ drawing information at least including ~~the~~ information of at least one object that can be displayed and ~~the~~ layout designating information for specifying a relative position direction with respect to ~~the~~ a direction of arranging ~~said the~~ object;

determining a relative placing position of ~~said the~~ object in a desired drawing area based on ~~the~~ layout definition information corresponding to the layout designating information obtained on analysis of ~~said the~~ drawing information; and

generating ~~the~~ (real) display position information corresponding to the relative placing position of ~~said the~~ object responsive to ~~said the~~ arranging direction; and displaying the object.

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Claim 19 (Currently Amended) A medium for causing an information processing apparatus to execute a program for processing a display of a plurality of objects to allow a command text to be used for both vertically-arrayed and horizontally-arrayed text, the program including the steps of:

generating ~~the~~ information of at least one object that can be displayed;

generating ~~the~~ layout designating information specifying ~~the~~ a relative position direction with respect to ~~the~~ an arranging direction of ~~said the~~ object; and

generating ~~the~~ drawing information at least including the object information and the layout designating information; and displaying the object.

Claim 20 (Currently Amended) An information processing method for processing a display of a plurality of objects to allow a command text to be used for both vertically-arrayed text and horizontally-arrayed text, the method comprising the steps of:

analyzing ~~the~~ drawing information at least including the information containing at least one object that can be displayed, ~~the~~ information pertinent to ~~the~~ a size of ~~said the~~ object in ~~the~~ a line direction and in ~~the~~ a line feed direction, ~~and the~~ information pertinent to ~~the~~ a layout;

acquiring ~~the~~ coordinate information pertinent to a display start position of ~~said the~~ object in a drawing area based on ~~the~~ a result of the analysis;

converting the coordinate information pertinent to ~~said the~~ display start position based on the layout-related information obtained by the result of ~~said the~~ analysis; ~~and~~

converting the coordinate information pertinent to the converted display start position into ~~the~~ real drawing coordinate information on [[a]] the drawing area; and
displaying the object.

Claim 21 (Currently Amended) The information processing method according to claim 20, wherein

~~said the~~ drawing information further includes the information pertinent to ~~the~~ a size of ~~said the~~ drawing area in the line direction and in the line feed direction; and

the coordinate information pertinent to the display start

position ~~converted being~~ is converted into the real drawing coordinate information in [[a]] the drawing area based on the information pertinent to the sizes in the line direction and in the line feed direction of ~~said~~ the drawing area.

Claim 22 (Currently Amended) The information processing method according to claim 21, wherein [[,]] if ~~said~~ when the object is horizontally written [[,]] ~~said~~ the real drawing coordinate information is used.

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Claim 23 (Currently Amended) The information processing method according to claim 21, wherein [[,]] if ~~said~~ when the object is vertically written [[,]] a difference obtained on subtracting the a coordinate value in the line direction of ~~said~~ the real drawing coordinate information from the size in the line feed direction of ~~said~~ the drawing area as the coordinate value in the line direction of ~~said~~ the real drawing coordinate information.

Claim 24 (Currently Amended) The information processing method according to claim 20, wherein said the object is represented on display means based on the real drawing coordinate information.

Claim 25 (Currently Amended) The information processing method according to claim 20, wherein [[,]]

the plurality of objects comprises a first object and a second object;

if when it is verified that ~~a further~~ the second object is to be displayed on ~~said the first~~ object[[,]] the drawing start coordinate information of ~~said further~~ the second object is generated based on the information pertinent to the size of ~~said the first~~ object in the line direction and in the line feed direction and on the layout-related information.

Claim 26 (Currently Amended) The information processing method according to claim 25, wherein ~~said further~~ the second object is drawn one of upstream ~~or~~ and downstream of ~~said the first~~ object based on the drawing start coordinate information of ~~said further~~ the second object.

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Claim 27 (Currently Amended) The information processing method according to claim 20, wherein[[,]]
the plurality of objects further comprises at least one decorative object;

if when it is verified that [[a]] the decorative object is to be displayed on ~~said the~~ object[[,]] the drawing start coordinate information of ~~said the~~ decorative object is generated based on the information pertinent to the size of ~~said the~~ object in the line direction and in the line feed direction and on the layout-related information.

Claim 28 (Currently Amended) The information processing method according to claim 27, wherein ~~decoration~~ the decorative object is drawn one of upstream ~~or~~ and downstream of ~~said the~~ object based on the drawing start coordinate information of

said the decorative object.

Claim 29 (Currently Amended) An information processing method for processing a display of a plurality of objects to allow a command text to be used for both vertically-arrayed text and horizontally-arrayed text, the method comprising the steps of:

capturing in storage means the drawing information at ~~least~~ including ~~the~~ information containing at least one object ~~which that~~ has been transmitted and ~~which that~~ can be displayed, the information pertinent to ~~the~~ a size in the a line direction and in ~~the~~ a line feed direction of ~~said the~~ object, and ~~the~~ layout-related information;

analyzing ~~said the~~ drawing information stored in ~~said the~~ storage means and acquiring ~~the~~ coordinate information pertinent to a display start position of ~~said the~~ object in a drawing area based on ~~the~~ a result of ~~said the~~ analysis;

converting the coordinate information pertinent to the display start position based on the layout-related information acquired by ~~said results~~ the result of analysis; and

~~demonstrating said displaying the~~ object on ~~said display~~ means based on ~~said~~ real drawing coordinate information.

Claim 30 (Currently Amended) The information processing method according to claim 29, wherein

the transmitted drawing information further includes ~~the~~ information pertinent to ~~the~~ a size in the line direction and in the line feed direction of the drawing area; and ~~wherein~~

the coordinate information pertinent to the converted display start position is converted into the real drawing coordinate information on ~~said the~~ drawing area based on the information pertinent to ~~said the~~ size in the line direction and in the line feed direction of ~~said the~~ drawing area.

Claim 31 (Currently Amended) The information processing method according to claim 29, wherein[[,]] ~~if said~~ when the object is [[a]] horizontally arranged object[[,]] ~~said the~~ real drawing coordinate information is used.

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Claim 32 (Currently Amended) The information processing method according to claim 29, wherein[[,]] ~~if said~~ when the object is [[a]] horizontally arranged object[[,]] ~~the a~~ difference obtained on subtracting ~~said the~~ real drawing coordinate information from the size in the line feed direction of ~~said the~~ drawing area is used as the coordinate value in the line direction of ~~said the~~ real drawing coordinate information.

Claim 33 (Currently Amended) The information processing method according to claim 29, wherein[[,]]

the plurality of objects comprises a first object and a second object; and

~~if~~ when it is verified that ~~a further~~ the second object is to be demonstrated on ~~said the first~~ object[[,]] the drawing start coordinate information of ~~said the second~~ further object is generated based on the information pertinent to ~~said the~~ size in the line direction and in the line feed direction of

said the first object and the layout-related information.

Claim 34 (Currently Amended) The information processing method according to claim 33, wherein ~~said further~~ the second object is represented one of upstream ~~or~~ and downstream of ~~said~~ the first object based on the drawing start coordinate information of ~~said further~~ the second object.

Claim 35 (Currently Amended) The information processing method according to claim 29, wherein[[,]]

the plurality of objects further comprises a decorative object; and

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if when it is verified that [[a]] the decorative object is to be added to ~~said~~ the object[[,]] the drawing start coordinate information of ~~said~~ the decorative object is generated based on the information pertinent to the size in the line direction and in the line feed direction of ~~said~~ the object and on the layout-related information.

Claim 36 (Currently Amended) The information processing method according to claim 35, wherein ~~decoration~~ the decorative object is ~~demonstrated~~ drawn one of upstream ~~or~~ and downstream of ~~said~~ the object based on the drawing start coordinate information of ~~said~~ the decorative object.

Claim 37 (Currently Amended) An information processing apparatus for processing a display of a plurality of objects to allow a command text to be used for both vertically-arrayed

text and horizontally-arrayed text, the apparatus comprising:

display means;

means for receiving ~~the~~ drawing information ~~at least~~ including ~~the~~ information containing at least one object ~~which~~ that has been transmitted and ~~which~~ that can be displayed, ~~the~~ information pertinent to ~~the~~ a size in ~~the~~ a line direction and in ~~the~~ a line feed direction of said the object, and the layout-related information;

storage means for storing ~~said~~ the drawing information received by ~~said~~ the receiving means;

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signal processing means for analyzing ~~said~~ the drawing information read out from ~~said~~ the storage means, acquiring the coordinate information pertinent to a display start position of ~~said~~ the object in a drawing area based on ~~the~~ a result of ~~said~~ the analysis, converting the coordinate information pertinent to the display start position based on the layout-related information acquired by ~~said~~ the results of analysis, and for converting the coordinate information pertinent to the converted display start position into the (real) drawing coordinate information on the drawing area of ~~said~~ the display means; and

control means for ~~demonstrating~~ displaying ~~said~~ the object on ~~said~~ the display means based on ~~said~~ the real drawing coordinate information from ~~said~~ the signal processing means.

Claim 38 (Currently Amended) The information processing apparatus according to claim 37, wherein

the transmitted drawing information ~~transmitted~~ further

includes the information on the size in the line direction and in the line feed direction of ~~said the~~ the drawing area; and

~~wherein said the~~ signal processing means converts the coordinate information pertinent to the converted display start position into the real drawing coordinate information on the drawing area based on the information pertinent to ~~said the~~ size in the line direction and in the line feed direction of ~~said the~~ the drawing area.

Claim 39 (Currently Amended) The information processing apparatus according to claim 37, wherein[[,]] ~~if said the~~ object is [[a]] horizontally arranged ~~object, said the~~ control means uses the real drawing coordinate information to display ~~said the~~ the object on ~~said the~~ the display means.

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Claim 40 (Currently Amended) The information processing apparatus according to claim 37, wherein[[,]] ~~if said when the~~ object is [[a]] horizontally arranged ~~object, said the~~ control means uses ~~the~~ a difference obtained on subtracting ~~said the~~ real drawing coordinate information from the size in the line feed direction of ~~said the~~ the drawing area as the coordinate value in the line direction of ~~said the~~ the real drawing coordinate information to display ~~said the~~ the object on ~~said the~~ the display means.

Claim 41 (Currently Amended) The information processing apparatus according to claim 37, wherein[[,]]
the plurality of objects comprises a first object and a

second object; and

~~if~~ when it is verified that ~~a further~~ the second object is to be demonstrated on ~~said~~ the first object[[,]] the drawing start coordinate information of ~~said~~ the further object is generated based on the information pertinent to ~~said~~ the size in the line direction and in the line feed direction of ~~said~~ the object and the layout-related information.

Claim 42 (Currently Amended) The information processing apparatus according to claim 41, wherein ~~said~~ the control means displays ~~said further~~ the second object one of upstream or and downstream of ~~said~~ the first object based on the drawing start coordinate information of ~~said further~~ the second object from ~~said~~ the signal processing means.

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Claim 43 (Currently Amended) The information processing apparatus according to claim 37, wherein[[,]]
the plurality of objects further comprises a decorative object; and

~~if~~ when it is verified that [[a]] the decorative object is to be added to ~~said~~ the object[[,]]~~said~~ the signal processing means generates the drawing start coordinate information of ~~said~~ the decorative object based on the information pertinent to the size in the line direction and in the line feed direction of ~~said~~ the object and on the layout-related information.

Claim 44 (Currently Amended) The information processing

apparatus according to claim 43, wherein ~~said~~ the control means displays the ~~decoration~~ decorative object one of upstream ~~or~~ and downstream of ~~said~~ the object based on the drawing start coordinate information of ~~said~~ the decorative object from ~~said~~ the signal processing means.

Claim 45 (Currently Amended) An information processing apparatus for processing a display of a plurality of objects to allow a command text to be used for both vertically-arrayed text and horizontally-arrayed text, the apparatus comprising:

means for reading out ~~the~~ drawing information from storage means storing ~~said~~ the drawing information, ~~said~~ the drawing information including ~~at least the~~ information containing at least one object ~~which~~ that has been transmitted and ~~which~~ that can be displayed, ~~the~~ information pertinent to ~~the~~ a size in ~~the~~ a line direction and in ~~the~~ a line feed direction of ~~said~~ the object, and ~~the~~ layout-related information;

display means for displaying ~~said~~ object;

signal processing means for analyzing ~~said~~ the drawing information read out from ~~said~~ the storage means, acquiring the coordinate information pertinent to a display start position of ~~said~~ the object in a drawing area based on ~~the~~ result of ~~said~~ the analysis, converting the coordinate information pertinent to the display start position based on the layout-related information acquired by ~~said~~ the results of analysis, and for converting the coordinate information pertinent to the converted display start position into ~~the~~ real drawing coordinate information on ~~the~~ a drawing area of ~~said~~ the

display means; and

control means for ~~demonstrating said~~ displaying the object on ~~said the~~ display means based on ~~said the~~ real drawing coordinate information from ~~said the~~ signal processing means.

Claim 46 (Currently Amended) The information processing apparatus according to claim 45, wherein

the drawing information stored in ~~said the~~ recording medium further includes the information on the size in the line direction and in the line feed direction of ~~said the~~ drawing area; and

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wherein ~~said the~~ signal processing means converts the coordinate information pertinent to the converted display start position into the real drawing coordinate information on the drawing area based on the information pertinent to ~~said the~~ size in the line direction and in the line feed direction of ~~said the~~ drawing area.

Claim 47 (Currently Amended) The information processing apparatus according to claim 45, wherein ~~if said when the~~ object is ~~[[a]] horizontally arranged object, said the~~ control means uses the real drawing coordinate information to display ~~said the~~ object on said the display means.

Claim 48 (Currently Amended) The information processing apparatus according to claim 45, wherein ~~if said when the~~ object is ~~[[a]] horizontally arranged object, said the~~ control means uses the a difference obtained on by subtracting said the

real drawing coordinate information from the size in the line feed direction of ~~said the~~ drawing area as the coordinate value in the line direction of ~~said the~~ real drawing coordinate information to display ~~said the~~ object on ~~said the~~ display means.

Claim 49 (Currently Amended) The information processing apparatus according to claim 45, wherein[[,]]

the plurality of objects comprises a first object and a second object; and

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~~if~~ when it is verified that ~~a further the second~~ object is to be ~~demonstrated drawn~~ on ~~said the first~~ object[[,]] the drawing start coordinate information of ~~said further the second~~ object is generated based on the information pertinent to ~~said the~~ size in the line direction and in the line feed direction of ~~said the~~ object and on the layout-related information.

Claim 50 (Currently Amended) The information processing apparatus according to claim 49, wherein ~~said the~~ control means displays ~~said further the second~~ object one of upstream or and downstream of ~~said the~~ object based on the drawing start coordinate information of ~~said further the second~~ object from ~~said the~~ signal processing means.

Claim 51 (Currently Amended) The information processing apparatus according to claim 45, wherein[[,]] ~~if~~

the plurality of objects further includes a decorative object; and

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when it is verified that ~~[[a]]~~ the decorative object is to be added to ~~said the~~ object~~[[,]]~~said the signal processing means generates the drawing start coordinate information of ~~said the~~ decorative object based on the information pertinent to the size in the line direction and in the line feed direction of ~~said the~~ object and on the layout-related information.

Claim 52 (Currently Amended) The information processing apparatus according to claim 51, wherein ~~said the~~ control means displays the ~~decoration~~ decorative object one of upstream ~~or~~ and downstream of ~~said the~~ object based on the drawing start coordinate information of ~~said the~~ decorative object from ~~said the~~ signal processing means.